

DAFTAR PUSTAKA

- [1] Conti, J., Holtberg, P., Beamon, J.A., Napolitano, S., Schaal, A.M., Turnure, J.T., Westfall, L. 2013. *International Energy Outlook 2013*. Outlook 2013. 312.
- [2] Sawin, J.L., Bhattacharya, S.C., Galan, E.M., McCrone, A., Moomaw, W.R., Sims, R., Sonntag-O'Brien, V., Sverrisson, F. 2012. *Renewables 2012 Global Status Report*. Ren21. 1-172.
- [3] Assegaf, Clevis, F. 2009. *Banana (Musa paradiacia) bioethanol production prospects using method of acid and enzymatic hydrolysis*. 13-25.
- [4] Putrasari, Y., Praptijanto, A., Santoso, W.B., Lim, O. 2016. *Resources , policy , and research activities of biofuel in Indonesia : A review*. Energy Reports. 2. 237-245.
- [5] Talebnia, F., Karakashev, D., Angelidaki. 2010. *Production of bioethanol from wheat straw: An overview on pretreatment, hydrolysis and fermentation*. Bioresource Technology. 101. 474-475.
- [6] Syafwina, Honda, Y., Watanabe, T., Kuwahara, M. 2002. *Pretreatment of palm oil empty fruit bunch by white-rot fungi for enzymatic saccharification*. Wood Research. 89. 19-20.
- [7] Hayn, M., Steiner, W., Klinger, R., Steinmuller, H., Sinner, M., Esterbauer. 1993. *Basic research and pilot studies on the enzymatic conversion of lignocellulosics*. Wallingford: CAB International. 33-72.
- [8] Sudiyani, Y., Styarini, D., Triwahyuni, E., Sudiarmanto, Sembiring, K.C., Aristiawan, Y., Abimanyu, H., Han, M.H. 2013. *Utilization of biomass waste empty fruit bunch fiber of palm oil for bioethanol production using pilot – scale unit*. Energy Procedia. 32. 31-38.
- [9] Yunus, R., Salleh, S.F., Abdullah, N., Biak, D.R.A. 2010. *Effect of ultrasonic pre-treatment on low temperature acid hydrolysis of oil palm empty fruit bunch*. Bioresource Technology. 101 (24). 9792-9796.
- [10] Maryana, R., Ma'rifatun, D., Wheni, A.I., Satriyo, K.W., Rizal, W.A. 2014. *Alkaline Pretreatment on Sugarcane Bagasse for Bioethanol Production*. Energy Procedia. 47. 250-254.

- [11] Nurrohmi, O. 2011. Biomassa Tandan Kosong Kelapa Sawit (TKKS) Sebagai Adsorben Ion Logam Cd^{2+} . Program Studi S1 Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Indonesia.
- [12] Firmansyah, I. 2009. Biokonversi Lignoselulosa Dari Biomassa Tandan Kosong Kelapa Sawit (TKKS) Menjadi Etanol Melalui Proses Sarifikasi dan Fermentasi Serentak (SFS). Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Indonesia.
- [13] Purnamayani, R. 2013. Teknologi Pembuatan Kompos Tandan Kosong Kelapa Sawit. Balai Pengkajian Teknologi Pertanian (BPTP) Jambi.
- [14] Dyartanti, E.R., Margono, Pranolo, S.H., Setiani, B., Nurhayati, A. 2015. *Bioethanol from sorghum grain (Sorghum bicolor) with SSF reaction using biocatalyst co-immobilization method of glucoamylase and yeast*. Energy Procedia. 68. 132-137.
- [15] Widodo, Y., Wahyuningsih, S., Newby, J. 2015. *Fuelling cassava development to meet the greater demand for food and bio-fuel in Indonesia*. Energy Procedia. 65. 386-394.
- [16] Widodo, Y., Wahyuningsih, S., Ueda, A. 2015. *Sweet potato production for bio- ethanol and food related industry in Indonesia: Challenges for sustainability*. Procedia Chem. 14. 493-500.
- [17] Wahyuono, R.A., Hakim, M.N., Santoso, S.A. 2015. *Feasibility study on the production of bioethanol from tapioca solid waste to meet the national demand of biofuel*. Energy Procedia. 65. 324-330.
- [18] Puspawati, S., Ainuri, M., Nugraha, D.A. 2015. *The production of bioethanol fermentation substrate from Eucheuma cottonii seaweed through hydrolysis by cellulose enzyme*. Agric. Sci. Procedia. 3. 200-205.
- [19] Jeon, H., Kang, K.E., Jeong, J.S., Gong, G., Choi, J.W., Abimanyu, H., Ahn, B.S., Suh, D.J., Choi, G.W. 2014. *Production of anhydrous ethanol using oil palm empty fruit bunch in a pilot plant*. Biomass Bioenergy. 67. 99-107.
- [20] Meinita, M.D.N., Marhaeni, B., Winanto, T., Setyaningsih, D., Hong, Y.K. 2015. *Catalytic efficiency of sulfuric and hydrochloric acids for the hydrolysis of Gelidium latifolium (Gelidiales, Rhodophyta) in bioethanol production*. J. Ind. Eng. Chem. 27. 108-114.

- [21] Triwahyuni, E., Muryanto, Sudiyani, Y., Abimanyu, H. 2015. *The effect of substrate loading on simultaneous saccharification and fermentation process for bioethanol production from oil palm empty fruit bunches*. Energy Procedia. 68. 138-146.
- [22] Muryanto, Triwahyuni, E., Hendarsyah. H., Abimanyu, H. 2015. *Reuse black liquor of alkali pretreatment in bioethanol production*. Energy Procedia. 68. 236-243.
- [23] Wahono, S.K., Hernawan, Kristiani, A., Tursiloadi, S., Abimanyu, H. 2014. *Characterization and utilization of gunungkidul natural zeolite for bioethanol dehydration*. Energy Procedia. 47. 263-267.
- [24] Balat, M., Balat, H., Oz, C. 2008. *Progress in bioethanol processing*. Progress in Energy and Combustion Science. 34. 551-573.
- [25] Tomas-Pejo, E., Alvira, P., Ballesteros, M., Negro, M.J. 2011. *Pretreatment Technologies for Lignocellulose-to-Bioethanol Conversion*. 149-176.
- [26] Ramos, L.P. 2003. *The chemistry involved in the steam treatment of lignocellulosic materials*. Quimica Nova. 26 (6). 863-871.
- [27] Shamsudin, S., dkk. 2012. *Effect of steam pretreatment on oil palm empty fruit bunch for the production of sugars*. Biomass and Bioenergy. 36. 280-288.
- [28] Boateng, A.A., Hicks, K.B., Flores, R.A., Gutsol, A. 2007. *Pyrolysis of hull-enriched byproducts from the scarification of hulled barley (*Hordeum vulgare* L.)*. Journal of analytical and applied pyrolysis. 78 (1). 95-103.
- [29] Misson, M., Haron, R., Kamaroddin, M.F.A., Amin, N.A.S. 2009. *Pretreatment of empty palm fruit bunch for production of chemicals via catalytic pyrolysis*. Bioresource Technology. 100 (11). 2867-2873.
- [30] Hanifuddin, M.N. 2016. Teknik Ultrasonik Dalam Proses Hidrodistilasi Rimpang Jahe Emprit (*Zingiber officinale* var. *Amarum*). Departemen Teknologi Industri Pertanian, Fakultas Teknologi Pertanian, Institut Pertanian Bogor.
- [31] Asakura. Y., Nishida, T., Matsuoka, T., Koda, S. 2008. *Effects of ultrasonic frequency and liquid height on sonochemical efficiency of large-scale sonochemical reactors*. Ultrasonics Sonochemistry. 15(3). 244-250.

- [32] Li, H. 2002. *Ultrasound and Microwave Assisted Extraction of Soybeand Oil*. Knoxville: University of Tennessee (Tesis).
- [33] Rizvi, S.S.H. 2010. *Separation, Extraction, and Concentration Processes in the Food, Beverage and Nutraceutical Industries*. Philadelphia: Woodhead Publishing Ltd.
- [34] Saha, B.C., Cotta, M.A. 2006. *Ethanol Production From Alkaline Peroxide Pretreated Enzymatically Accharified Wheat Straw*. Biotechnol Prog. 22. 449-453.
- [35] Adnan, M. 1997. Teknik Kromatografi Untuk Analisis Bahan Makanan. Andi.
- [36] Hendrayana, S. 2006. Kimia Pemisahan. Bandung: Rosdakarya.
- [37] Gritter, R.J., dkk. 1991. Pengantar Kromatografi Terbitan Kedua. Bandung: Institut Teknologi Bandung.
- [38] Sluiter, A., Hames, B., Ruiz, R., Scarlata, C., Sluiter, J., Templeton, D., Crocker, D. 2010. *Determination of Structural Carbohydrates and Lignin in Biomass*. Laboratory Analytical Procedure (LAP). National Renewable Energy Laboratory. TP-510-42618.
- [39] Alvira, P., Tomas-Pejo, E., Ballesteros, M., Negro, M.J. 2010. *Pretreatment technologies for an efficient bioethanol production process based on enzymatic hydrolysis: A review*. Bioresource Technology. 101 (13). 4851-4861.
- [40] Velmurugan, R., Muthukumar, K. 2012. *Ultrasound-assisted alkaline pretreatment of sugarcane bagasse for fermentable sugar production: Optimization through response surface methodology*. Bioresource Technology. 112. 293-299.
- [41] Esfahani, M.R., Azin, M. 2012. *Pretreatment of sugarcane bagasse by ultrasound and dilute acid*. Asia-Pac. J. Chem. Eng. 7. 274-278.
- [42] Zulkiple, N., Maskat, M.Y., Hassan, O. 2016. *Pretreatment of Oil Palm Empty Fruit Fiber (OPEFB) with Aqueous Ammonia for High Production of Sugar*. Procedia Chem. 18. 155-161.
- [43] Balachandran, S., Kentish, S.E., Mawson, R., Ashokkumar, M. 2006. *Ultrasonic enhancement of the supercritical extraction from ginger*. Ultrasonics Sonochemistry. 13. 471-479.

- [44] Mason, T.J. 1999. *Sonochemistry: current uses and future prospects in the chemical and processing industries*. Philos. Trans. R. Soc. London. A 357. 355-369.
- [45] Elwin, Musthofa, L., Hendrawan, Y. 2014. Analisis Pengaruh Waktu Pretreatment dan Konsentrasi NaOH terhadap Kandungan Selulosa, Lignin dan Hemiselulosa Eceng Gondok Pada Proses Pretreatment Pembuatan Bioetanol. *Jurnal Keteknikaan Pertanian Tropis dan Biosistem*. 2 (2). 110-116.
- [46] Feng, H., Barbosa-Canovas, G., Weiss, J. 2011. *Ultrasound Technologies for Food and Bioprocessing*. New York (US): Springer.
- [47] Zhang, Z., Wang, L., Li, D., Jiao, S., Chen, X.D., Mao, Z. 2008. *Ultrasound-assisted extraction of oil from flaxseed*. *Separation and Purification Technology*. 62. 192-168.
- [48] Subhedar, P.B., Gogate, P.R. 2014. *Alkaline and ultrasound assisted alkaline pretreatment for intensification of delignification process from sustainable raw-material*. *Ultrasonics Sonochemistry*. 21. 216-225.
- [49] Grewell, D., Montalbo-Lomboy, M., Chand, P. 2013. *Enhancing biofuel production by ultrasonics*. *Proc. Mtgs. Acoust.* 19. 45091.